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Virginia Wildlife

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MAY

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COVER: On each of these early May mornings several hundreds, perhaps thousands, of hunters sally forth in the pre-dawn darkness hoping to catch a glimpse, shortly after first light, of the scene done for this month's cover by artist J. M. Roever of Cocoa Beach, Florida. Those who have seen a wild gobbler in full display, whether they succeeded in bringing it to bag or failed, have had an experience they will cherish all their lives.

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People and the Public

ANYONE who by choice or duty has to deal frequently with "the public" is likely to develop a strange dichotomy in his feelings toward people. Individually, people are "salt of the earth." Collectively, they are sometimes more inclined to be "flies in the soup."

Individually most people are honest, law-abiding, friendly and respectful of the rights of their fellow man. Collectively people often manage to give grounds for the belief that they will do just about anything they think they can get away with no matter who gets hurt.

Honest, law-abiding, friendly people want, and need, access to the outdoors. They are the salt of the earth. The opportunity to enjoy a stretch of river, some open sky, an uncluttered landscape, is their birthright. To meet the legitimate demand and need of honest, law-abiding, friendly people—to protect their birthright—thousands of acres of open land and scores of access areas on public waters have been acquired and developed in the last decade and many more are planned. But when the salt loses its savor, the whole program is put in jeopardy. When acts of vandalism occur, when rowdy and immoral conduct offends sensibilities, when litter renders what once was beauty an eyesore and a nuisance, the flies are in the soup.

Only a few among all who use these public access areas are responsible for acts which give rise to the grave doubt that people really are honest, law-abiding, friendly, and respectful of the rights of others. But these few already are a few too many, and their numbers and their acts become greatly exaggerated in the recounting by another small but noisy minority which, as a group, collectively fails to exhibit to any marked degree its individual members' virtues of friendliness and tolerance of human frailty in others. These latter would deny the many, as a reprisal against the few.

What needs to be done seems clear enough. Those who cherish their right to the outdoors must protect it. They must help educate and persuade those who put that right in jeopardy. And those honest, law-abiding, friendly folk who love people but abhor "the public" could aid in the solution, instead of remaining part of the problem, if they, too, would help in the educating process, and leave the complaining to us.

Education and persuasion in this case can take several forms. One is the direct, personal, on-the-spot confrontation. The desire to conform to behavior patterns acceptable to the group is one of the stronger human motivations. A direct confrontation may make it plain to a delinquent that there is a group to whom bad outdoor manners is not acceptable conduct, and thus serve as a deterrent to such behavior in the future. Another useful form of education and persuasion is the taking of names, license numbers, or other means of identification, reporting to authorities immediately, and standing ready to face the accused as a witness if called upon. It is sad but true that there are those among us who can be taught some things during a day in court that they apparently are unable to absorb anywhere else during a lifetime.

Whatever the method, it is up to the salt of the earth to get the flies out of the soup. Denying the public access to the outdoors because of the misdeeds of a few misguided members is unthinkable.—J.F.Mc.

Credit Where Credit Is Due

PICTURES by Kesteloo add greatly to my enjoyment of *Virginia Wildlife*. However, I suspect he would deny the photographic credit given him on page 21 of the April, 1968, issue for the mounted head of a spike buck.

I killed that buck in 1932, my first, and took the picture in 1933 after the head came back from the taxidermist. I still have the deer head and the photo negative.

George B. Johnson
Newport News

The credit line on page 21 of the April Virginia Wildlife *was meant to apply only to the two lower photos. We knew who took those. Mr. Johnson's photo turned up in our files without date or credit information, and we used it because it was the best illustration we had of typical antler development under conditions of mediocre nutrition. Now, at least, if we have occasion to use it again we will know who gets the credit.—Ed.*

Give It Back to the Indians?

WHAT do you mean, "Should We Manage the Black Bear?" (March, 1968). How dare a magazine of your stature and responsibility even suggest an alternative? Frankly, I find your publication very willy-nilly and very compromising on conservation issues.

It is time that radical conservation principles be enacted in this nation. For example, we should begin consideration of a plan which would remove all human habitation from a state such as Virginia or North Carolina, and completely turn the entire state into a wilderness area. Instead of such progressive proposals, you ask: Should we manage the black bear?

I am sorry Virginia has no adequate publication supporting at least minimal conservation progress.

William C. Gudal
Washington and Lee University
Lexington

Win a Vacation

I wonder if you could mention in *Virginia Wildlife* the fishing contest that is sponsored by radio station WHPL and the program "The Virginia Outdoorsman," for which I am the speaker.

The contest is for the largest smallmouth or largemouth bass taken in the waters of Virginia or West Virginia. The rules are simple. The fish is to be caught legally on hook and line by a resident of Virginia or West Virginia in the waters of either state between April 1 and August 31 this year; be at least 15 inches in length; and be weighed on a government-inspected scale. The information must be recorded on a piece of paper signed by a witness to the weighing, and sent to Fish Contest, WHPL Radio, Box 828, Winchester, Virginia 22601.

The grand prize will be a week's vacation for one at Halls Lodge in Astor, Florida, on the St. John's River, including lodging, boat and motor, between April 1 and January 14, either in 1968-69 or 1969-70.

David Ramsey
Game Warden
Winchester

ONE MOUNTAIN EAST

By BOB GOOCH
Troy

"SOUNDS like a good idea. I'll be at your house by nine." wrote Dick Cocke.

It wasn't exactly a letter. Dick, a busy Richmond, Virginia, attorney, had scribbled his reply on my invitation to open the Virginia trout season on Crab Run in Highland County and stuffed it back in the mail to me.

By midmorning we were well into Virginia's Allegheny Mountains. Highway travel is slow in this mountainous part of the Old Dominion, and Highland County residents

Trout congregate in the "blue hole," a long, deep pool at the foot of a stretch of rapids.

are so conscious of it that they measure distance in mountains instead of miles. For example, Monterey, their county seat, is five mountains west of Staunton and three mountains east of the West Virginia line.

Crab Run is one mountain east of Monterey.

It is one of several excellent trout streams in a county that claims itself the trout capital of the East. Dick and I were familiar with Highland County's fine trout waters as we had fished them many times.

Crab Run is a picture-book stream. It holds good water and a few native brookies. The natives are small but they add the spice, for when you creel a fully colored brookie you find satisfaction in the knowledge that you are fishing a stream that has provided trout fishing for generations—long before the first hatchery trout was spawned. This Highland County stream skirts U. S. Highway 250, making it convenient for a couple of anglers to work leapfrog style.

And then there's the lure of Highland County, a southern gem of mountains, trout and sugar maples, nestled in the corner of a state that elsewhere produces cotton, peanuts and Spanish moss.

Crab Run skirts U. S. Highway 250 and is located one mountain east of Monterey and four mountains west of Staunton.

The Virginia trout season opens at noon the first Saturday in April. The noon opening has a number of advantages. Probably most important is the lid it places on the first day's catch even though approximately 70% of the stocked trout still end up in the creels of the small army of anglers. The high-noon opening also gives more people an opportunity to participate—those who have to work a half day, and others who live considerable distances from trout country and do not want to make an overnight trip in order to be on the stream for a dawn opening.

Dick and I had planned our arrival for a few minutes before noon. We were late, though, and the young season was already underway when we parked the car at the stream's edge.

Hurriedly we assembled our tackle and pulled on hip boots. Dick chose a fast stretch near the car, but I headed upstream to the Blue Hole, a favorite pool that the year before had favored me with a fast limit of brooks and rainbows.

"Any luck?" I queried a shirt sleeved angler drifting

It's a "magazine cover" trout stream.

salmon eggs through the long, blue pool. Not bothering to look up, he shook his head.

The spring weather was warm and balmy—in sharp contrast to the 1966 opener when a late blizzard blew out of the West Virginia mountains and dusted the Alleghenies with a light coating of snow.

Several other anglers were already working this prime Crab Run water, but there was plenty of room and I moved in near the head of the pool.

Most Virginia trout streams boast a "blue hole," a large bottomless pool at the foot of some roaring rapids—magazine cover water where trout tend to congregate. I like to start the season here, to initiate the new season with a couple of quick catches, and then move on, methodically working the stream until I limit out. The stream limit is eight.

My tackle was an ultralight spinning outfit with worms for bait. A couple of split shot were clamped on to carry my lure deep in the strong current.

I made a cast to the head of the pool, and anxiously watched my line for a telltale twitch as the worm-draped

The author with a couple of good rainbows.

hook tumbled downstream.

Nothing happened. I reeled in and cast again. This time as the line swung around near the end of the drift, I felt a light tap! Eagerly I struck, felt the heart-warming gyrations of a fish—but then it was gone!

Encouraged, I reeled in for another cast. This time the hit was a solid one! The line shot out, and I set the hook. My light glass rod sprang to life, and my friendly stream neighbors made room for my tussle with the trout. The big brookie shot to the surface, rolled, and then surged back to the depths. I maintained steady pressure, and gradually worked the stubborn fish to a sand bar. He rolled on his side and I skidded ashore my first trout of the season.

Funny how that first fish can settle an angler down. Sort of breaks the ice. Has the reassuring effect of that first bird resting in your game pocket on a fall quail hunt. Relieves a little pressure to know that on this trip you won't go home skunked. As the young season aged I added two smaller brookies to my creel.

Lost in the trout-stream drama, I had failed to notice Dick move up beside me. Working the fast water with a spinner-fly combination, he had landed a hefty rainbow, but got no further action. I offered him some bait, and he removed his artificial lure, tied on a hook and joined me.

Midway a drift I felt a light tug, set the hook and was onto a good fish. He waged a peculiar, corkscrew fight though, and as I worked him in I saw why. This time I had a fat sucker. Removing the hook from his vacuum-cleaner mouth, I added him to my creel. Suckers taken from icy mountain streams are delicious. For table use some anglers put them ahead of hatchery trout.

Dick got into the bait fishing game with a small native, and as he removed the hook I suggested we give some thought to lunch. It was one o'clock and we were both hungry, having had breakfast early at our respective homes. I live in Troy, in Fluvanna County, a good 90 miles east of Crab Run, and Dick's Richmond home is 50 miles east of mine. Our haste to make the opening hour had ruled out a morning coffee break.

There are several good restaurants in Monterey over a high mountain pass, but we decided to try the nearby vil-

Crab Run flows through the village of McDowell, offering trouting within the village limits.

lage of McDowell where no mountains blocked our path. In fact, the popular trout stream runs right through the heart of the little village and joins the Bullpasture River, a good trout stream in its own right. Trout are caught within 100 yards of the combination general store and post office where we bought crackers, cheese and soft drinks for a makeshift lunch.

We loafed for awhile in the store, talked to other anglers, and purchased several odds and ends of tackle before returning to our fishing.

From the Blue Hole to its junction with the Bullpasture, Crab Run offers five or six miles of exciting stream fishing, but the upper stretches are the best. Stocking is heaviest there.

Dick and I decided to resume our fishing at the Blue Hole and work back downstream. Since the highway parallels the stream I could move the car as we fished, and it would be with us when we decided to quit.

The trout program in Virginia is a solid one and the future of the sport is bright. (Continued on next page)

The author used spinning tackle on this Crab Run trip.

One Mountain East (Continued)

It has not always been so, however.

Over 200 sparkling streams ribbon the Old Dominion high country, but unfortunately most of them will not support a fishable native trout population. To keep the sport alive, the Commission of Game and Inland Fisheries long ago had to resort to put-and-take fishing. The fish are reared to catchable size in state hatcheries and released in suitable waters.

Early stocking efforts were not encouraging. The liver-fed trout were costly to raise, and the vulnerable fish left a lot to be desired. The hatchery operation took a big slice out of the fish division budget, and many sportsmen felt the program should be abandoned.

Fortunately, the development of pellet food has cut feeding costs and at the same time produced a healthier and a more palatable fish. Added efficiencies in the hatchery operation plus the introduction of a special trout license to defray the cost of the program have put trout fishing on a self-sustaining basis in a state where the sport has long been traditional.

The Commission of Game and Inland Fisheries now pours over 750,000 trout annually into the state's better streams. Most are brooks and rainbows, but a few browns are also stocked. The stocked streams are well marked by yellow posters designating them as trout waters.

After the initial flurry of action that may last only an hour or two, many of the less patient anglers give up and go home. Upon our return to the stream we found much of it almost deserted. Small groups still clung to the larger holes, and a few fishermen were working the riffles and small pockets.

First-day anglers tend to fish the pools only, and we planned to take advantage of this for our late afternoon fishing. While trout are not as plentiful in the fast water and smaller pools, the few there are likely to escape the early rush.

I dropped Dick and parked the car a couple of hundred yards downstream. Here the stream swung away from the highway, and I intended to fish it through to a point where it curved back to the road.

Hugging the bank, I flipped my kicking worm into the fast water and gave it line as it rolled downstream. It shot by a midstream boulder, and I saw a flash of silver as the tumbling worm slipped into the eddy below the rock. I struck instinctively, but only nicked the fish which scooted back under the rock. I repeated this pattern several times but couldn't budge another customer.

Hatchery trout may be vulnerable during the early hours of a new season, but they learn fast. Many are hooked and lost, and others spooked by the commotion in the stream. These are the 30% that survive opening day, and they quickly become wary and elusive. The successful angler has to fall back on age-old fishing tactics—wading quietly, keeping his shadow off the water, concealing his approach to likely spots, and presenting his lure in a natural manner. The evasive 30% furnish the best sport.

Double action in the "blue hole" as the rainbow in the background tests the thin Highland County air.

This is trout fishing as it has been for generations, and as it was meant to be.

Wading downstream, I noticed a narrow trough-like rapid had washed a good hole under the near bank. The current was strong, but it was an ideal spot for a brook or rainbow to lie in wait for a tidbit to drift in. The problem would be landing a good fish against that current. And if he darted under that overhanging bank he could hang up and shake loose.

But first I had to connect with a fish.

My cast dropped a fresh worm several feet above the undercut, and the split shot took it deep as it was swept toward the hole. The line peeled off the reel, and when I was sure the bait was in the hole I flipped the bail. As the line tightened I was rewarded with a solid strike! A flick of the wrist set the hook, and this time I was at close quarters with a good trout.

As I had feared the fish surged toward the overhanging bank, but as I maintained pressure he changed tactics and cracked the rippling surface with a beautiful jump.

A rainbow!

Instead of trying to buck the swift current I fought him near the edge of the little hole, and as he tired moved slowly down to land him.

Crab Run holds both brooks and rainbows, but the worm fisherman is most likely to interest the brookies. The rainbow likes salmon eggs, minnows and artificials. I usually stick with worms on opening day, switching to artificials as the season progresses.

Crab Run can be counted on for good fishing into the summer. Holdovers from the initial stocking, a sprinkling of natives, and in-season stocking assure fair success for the angler willing to work for his trout.

As the delightful April afternoon wore on I lost myself in the fishing, the joy of being out-of-doors, and relaxing knee-deep in a singing trout stream. Both my camera and fishing tackle got good workouts before the long shadows of the Allegheny peaks began stretching across Crab Run.

Reluctantly, I took down my tackle, sprinkled some cold water over my catch, washed my boots and headed for the car. Dick was still somewhere on the stream. We had lost each other as we became absorbed in the fishing.

I removed my boots, slipped on some comfortable shoes and into a warm jacket that took the bite off the crisp evening air. April evenings are cold in Highland County.

The Virginia trout season is a long one—the first Saturday in April until December 31. After opening day fishing hours are an hour after sunrise until an hour after sunset. A local ordinance in Highland County prohibits fishing before one o'clock on Sunday.

There are no size limits on put-and-take trout. All fish must be counted toward the limit, but the majority of the stocked trout are yearlings with a few two year olds and lunker breeders included to heighten the excitement.

There are motel and restaurant accommodations in Monterey, but reservations are advisable for April and May when the trout traffic is heaviest. Crab Run is just outside the George Washington National Forest where camping facilities are available for those who want to rough it.

Dick soon appeared, and we took a few minutes to chat and admire our catches.

And as the sun slid behind a rugged Highland County mountain we cleaned our trout and packed them for the trip home. Highland is the kind of country a trout fisherman finds it hard to leave, but we had four mountains to cross before we hit the flat country and highways you measure in miles.

Besides, there would be other days on Crab Run where the healthy put-and-take trout carry on in the fine tradition of their mountain-bred ancestors.

A mixed Virginia creel limit—six rainbows and two brookies.

Dick cleans his catch, before heading back to where distance is measured in miles instead of mountains.

Vital Statistics of a Deer Herd

By MAX CARPENTER
Game Biologist

MORE data has been gathered on the white-tailed deer than on any other game animal. This is an indication of the importance of this animal to the recreation and economy of Virginia. Much of the data accumulates in the files each year and is used occasionally when we write an article on deer hunting or management, and when the Game Commission sits down to work over the next fall's hunting regulations. Let's pick out the data on a specific county west of the Blue Ridge to see what has happened to the deer population over the past 20 years.

Commission photo by Kesteloo

Rockingham County deer herd is exactly 35 years old, can be traced back to a successful stocking effort begun in 1933.

There are only a few counties in the west that can be classed in the big league according to the number of deer harvested. The "big 5" that have yielded over 500 and on up to over 2000 deer a year are Augusta, Bath, Frederick, Rockingham and Shenandoah counties. All of the above counties, with the exception of Rockingham, had their highest deer kill in 1959 and 1960, followed by a general decline in harvest. Of the five, Rockingham is the only one that has had a generally consistent increase in the harvest each year, with a slight drop in 1962, but not as drastic as in some of the other counties. It is of interest to look back on some of the early Rockingham deer data, and to analyze the cards of the deer that were checked last fall in the county. It gives a general picture of the phenomenal capacity of deer to increase their population, and the effect they have on hunters in the state and in many other states.

There were some deer killed in parts of Virginia during the 1920's. In Rockingham County, however, the last of the original stock was killed about 1890. An effort to provide deer hunting was started in 1933 when 17 deer were released in Big Run near Port Republic. During the 10 years that followed, 290 whitetails were bought by sportsmen and the Game Commission, and released to get a population started. The following table shows the number of deer stocked and the area where released:

TABLE 1
EARLY DEER STOCKING RECORDS IN ROCKINGHAM COUNTY

Area	*Year*	*No. of Deer*
Port Republic	1933-34	17
Rawley Springs	1936-38	12
Mud Hole Gap	1938-39	18
Dry River	1939-43	58
Skidmore Branch	1939-40	31
Union Springs Hollow	1940-41	32
Dry Run	1940-43	63
Blacks Run	1940-41	1
Dry Run	1940-41	13
Kephart Hollow	1941-42	11
Rocky Run	1941-42	2
Cow Knob	?	13
Beaver Creek	1942-43	18
Total for 10-year period		289

Two years after the close of the stocking period, a season was permitted in 1945; 50 deer were harvested. The first two years, the kill was estimated by game wardens. Then in 1947, a law was passed making it mandatory for all deer taken by hunters to be checked at an official station. With the exception of a few years, the deer herd in the county has continued to grow and the number of animals harvested has shown an increase. This trend could change in the next couple of years. With the decline of the deer herd in the counties north of Rockingham, the hunters have moved into Rockingham in greater numbers. This heavy hunting pressure could effectively cut the deer herd to the point at which it would not continue to attract the present concentration of hunters. Up to 1966 there had been a general upward trend in the total deer kill, but the 1967 kill indicates that a decreasing trend in hunting pressure, or a reduction in the deer population, or both, may already have set in. As shown in Table 2, over 17,000 deer have been harvested during the past 21 years:

TABLE 2
YEARLY DEER HARVEST IN ROCKINGHAM COUNTY

Year	*Harvest*
1945	50
1946	84
1947	52
1948	75
1949	101
1950	150
1951	198
1952	256
1953	370
1954	462
1955	469
1956	896
1957	822
1958	1155
1959	1329
1960	1412
1961	1567
1962	1058
1963	1203
1964	1273
1965	1427
1966	1429
1967	1177
Total	17,015

To gain a better picture of the age composition of deer taken during the 1966 season, and to find the number of states represented by successful hunters, the 1429 deer cards were analyzed. Of the 1001 bucks taken, 455, or 46 percent, were either buttons or spikes. Ten percent were four pointers, 8 percent were six pointers, 14 percent were 8 pointers, while 4 percent were 10 pointers. There were only 16 deer with more than 10 points.

TABLE 3
ANTLER COMPOSITION OF 1966 SEASON

Number of Points	*Number of Deer*
2	455
3	69
4	103
5	47
6	81
7	47
8	139
10	44
12	13
14	1
15	1
22	1

Commission photo by Kesteloo

Brushy second growth made ideal deer habitat during the early years of the herd's growth.

Weights could not be analyzed because all check stations do not gather this information. To our knowledge, the heaviest deer killed during the 1966 season was a 10-pointer, taken by Mr. C. F. Masely of Poquoson, Virginia, that tipped the scales at 236 pounds.

Hunters from many states came to Rockingham to get their deer. Thirteen states were represented in the buck kill and hunters from 10 states killed a doe. (See Table 4.) As could be expected, the largest number of successful non-resident hunters came from the bordering states of Maryland, Ohio, Pennsylvania and West Virginia in that order. Only one hunter from Washington, D. C., was successful in getting a deer.

TABLE 4
STATES REPRESENTED BY SUCCESSFUL HUNTERS

State	*Buck*	*Doe*
Virginia	834	412
Maryland	59	22
Ohio	24	11
Pennsylvania	20	9
West Virginia	15	5
North Carolina	2	2
Florida	2	—
Indiana	2	—
Kentucky	2	1
Georgia	1	—
New Jersey	1	—
Illinois	1	—
Arkansas	1	—
Tennessee	—	1
California	—	1
Washington, D. C.	—	1
Totals	964	465

The white-tailed deer has a greater impact on the economy of the county and provides recreation for more people than any other game animal. What is the future for deer in Rockingham County for the next 10 or 20 years? We can see from the above tables that if conditions are right deer can be hunted for a few years after stocking, and that an established deer herd has a tremendous breeding potential. However, the figures also show that herds are vulnerable to hunting and can be shot down. The condition of the range is closely correlated to the number of deer found in the county. Forest habitat over the past 20 years has matured to the point where a large portion now consists of older trees that do not produce tender browse close to the ground where deer can reach it. Consequently, fewer deer can be carried on the range in the future unless a drastic change in timber-cutting practices takes place. Large scale cutting of timber on National Forest land would produce more acres of bushy growth. This is not likely to happen in the near future unless present timber and pulpwood markets change substantially.

It is rather certain that hunting pressure will increase, which will put more stress on the deer herd. From experience gained in other counties, it can be predicted that the deer kill will drop off at a constant figure. Hunters will have to grow accustomed to seeing fewer deer than during the peak years. With proper management and cooperation from the public, however, there should be good deer hunting in Rockingham County for years to come.

Much of the forest now has matured, and with its larger trees it does not produce the quantity of browse that it once did except along its edges.

Commission photo by Kesteloo

COMMISSION-OWNED LAKES:

Lake

Lake Orange is located in an attractive setting of hardwood timber and rolling farmland.

Commission photo by Kesteloo

By HARRY GILLAM
Information Officer

LAKE Orange is in many ways a showplace among Game Commission lakes. Constructed in 1963-64, it incorporated all of the best features for fish management. It has 18 acres of watershed for each acre of impounded water. It boasts the most modern type of outlet tower and has a holding pond and seining basin for the recovery of fish during renovation operations. Fertilization has produced excellent algae blooms and thus abundant food for the resident pan fishes.

Bass, bluegill, redear sunfish and channel catfish were stocked in the fall of 1964 and did well in the newly impounded waters. So many of the bass survived that they became somewhat stunted due to the competition of sheer numbers. When the lake was opened in 1966 a special 9½ inch limit was imposed to protect the smaller bass. The following year this was raised to 12 inches minimum.

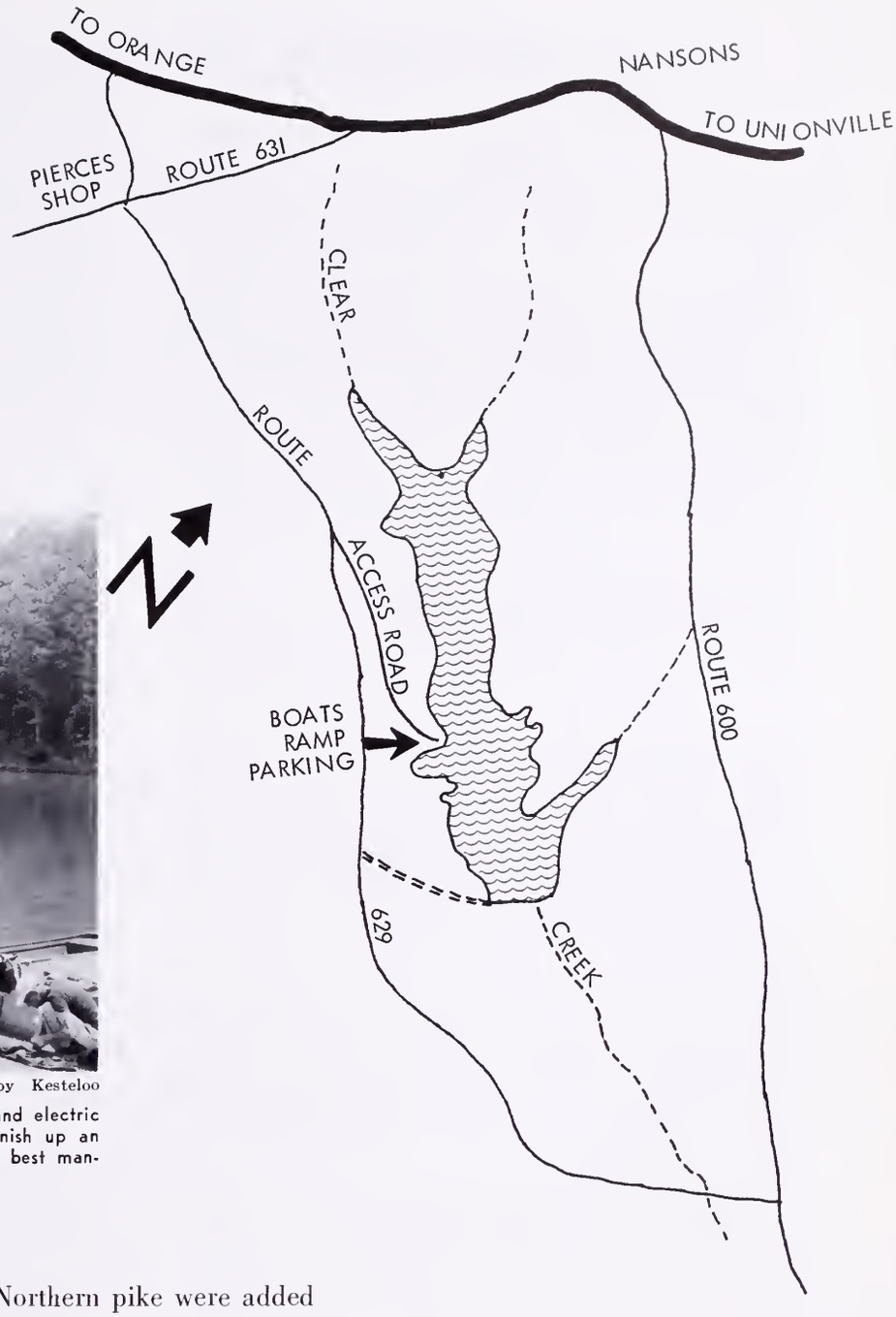
The opening day crowd, estimated to number 557, took approximately 1,100 pounds of fish home in the first ½ day. Most bass were in the 9½ to 12 inch class, catfish averaged a pound and a half, and half-pound bream were common fare. Since that time the bass have grown up, the bream still run large, and the lake continues to produce plenty

Lake Orange is the Commission's newest and best-designed lake. Its 124 acres are well suited to intensive fertilization and produce a bumper fish crop. The concession area is located in the center on the left shore.

Orange

Commission photo by Kesteloo

Facilities at the lake's concession include aluminum boats and electric motors which fishermen may rent. Here fisheries workers finish up an evaluation of the lake's fish population as a guide to the best management procedure.



of nice cats running to 3 pounds and over. Northern pike were added in 1966 and at least eight legal 26 inchers have been caught.

The lake was designed with an eye to fisherman facilities, including a spacious parking lot, a boat ramp, comfort stations and a concession stand. Boats with electric motors, bait, tackle and food are available from the concessionaire who operates the facility from March through December. These facilities for the fisherman are attractively located on a point on the lake's south shore. Picnic tables are provided for added public enjoyment.

Bluegill fishing is excellent most of the year, although action can be a little spotty in early spring. Bass fishing is best in May and June and again in October and November. Channel cat fishing reaches its peak during the hot summer months.

The lake is located in an attractive setting of rolling farmland and hardwood timber. It is 5 miles east of Orange and is reached via Route 629 from State Route 20. The earth fill dam is 40 feet high and 900 feet long, backing up water to a maximum depth of 25 feet in the lake.

Tender Miracle

By KATHERINE W. MOSELEY
Rixeyville

THE tender miracle begins when the warming sun thaws the wrinkled, frost-crusted earth; when the rivers crack loose from their icy cages; when the lengthening days affect the birds' internal rhythm and they, on lifted wings, are ripe with an age-old wisdom.

An inherited knowledge charts the birds' behavior for courtship, mating and nest building. As that time approaches the male bird returns to his favorite summer location and selects his territory. Each bird seems to know how large a piece of land is needed for his prospective family. Once chosen, the territory is defended against intruders. These boundaries are constantly called out by song from the borders he has made. However, so varied are the needs of each family there is often little real competition. Woodpeckers have different work habits and several can use the same tree. The winging insect-catching birds are not the least interested in the robin's wormy diet. The junco, the ruffed grouse and hermit thrush prefer to nest on the forest floor while the crow, oriole and hawk choose the highest branches of the trees. Most of the other perching birds are happy in the lowest or middle sections.

It has been suggested that territorial hostility is really a good-neighbor policy instead of antagonism. Territorial defenders may begin in a belligerent, suspicious manner, but once the property lines are staked they are respected by other birds and the development then is made up of different families who own their own homes but are socially bound to each other.

When the female arrives she may also seem to be threatened by the male, but she neither fights nor leaves. Instead she flutters her wings and is coquettish and the male understands. He then begins his courting songs with special feather displays and the wooing flights. The tender miracle is under way.

As the reproductive cycle reaches a climax, so does the birds' building ambition and knowledge. When there is the need for a nest the bird knows exactly how it must be made and where it must be placed. Every nest that is constructed by a bird follows the pattern of every other nest that species has ever built. The bird is neither taught by the parents, nor does it practice nest-building ahead of time.

With no tools but a minute brain, slender claws and a sharp beak, the bird puts together the shelter that will cradle the next generation of birdlings. No two species build identical nests, and they range in architecture from an almost bare place on the ground where the whip-poor-will lays well-camouflaged eggs to the exquisite woven baskets of the orioles and vireos.

The orioles weave a nest that not even a gifted human artist could duplicate. Satchels are made of plant fiber and plant down with an occasional piece of string. These are hung, securely anchored, forty to fifty feet above ground. All of the vireo's nests are suspended beauties woven of cobwebs, bark, skeletal leaves and caterpillar silk.

Wrens have the curious habit of building several nests but using only one. These nests may be placed anywhere from inside an old boot in the barn to a small basket in the garden. Each nest is built with gay-hearted zest while merry songs bubble and ripple in a torrent of ecstacy.

The cowbirds build no nests. When the female is ready she finds the nests of warblers, sparrows or other small birds where she deposits her eggs and then departs on her care-free way, leaving her offspring to be cared for and fed by foster parents. Doves construct simple platforms of sticks. Most warblers have daintily woven nests of grasses. Woodpeckers chisel out their nurseries in rotted trees and the eggs are laid on chips of wood. The next year the abandoned holes may be taken over by either titmice, wrens, swallows or bluebirds in which they build conventional nests. Robins and swallows use mud as mortar in nest construction.

Familial intelligence is the mainstay of bird homes, but ingenuity and individual bird talent are often evidenced. If robins build when the weather is dry and mud is non-existent, they have been seen to gather grass and dried leaves to soak in a bird bath or watering trough, then roll the wet mass in dirt before carrying the muck to the intended nest. The crested flycatcher searches for a discarded snakeskin to place in the nest, perhaps to frighten away enemies. One fall we were surprised to see ragged strips of plastic waving from old nests of the spring before. We have no idea what the birds thought of it as new nest building material, but it was seen in at least four old nests in our woods.

The goldfinches stay in flocks until July before they pair to raise a family. They wait until the early thistles have provided the fluff they need for lining the nests. Towhees nest on the ground, perhaps because they scratch the earth for food. Phoebes protect their nests from spring rains, so they choose sites under bridges or trestles, under beams of barns or arches of churches.

The laying of the eggs may start after the last straw has been placed. Most of the perching birds lay an egg daily, early in the morning. The number of the eggs varies with each species. The hummingbird has only two, while a pheasant or duck may lay 12 to 15 in a single clutch. In perching birds the incubation is usually the mother bird's responsibility. The male may go about his own affairs, or he may act as constant protector and guardian of the little family with the mother on the nest.

The unborn bird is equipped with a horny growth on the tip of its beak with which it can break the shell for birth. The egg tooth breaks off in a day or so after the bird hatches. Some birds emerge completely helpless, born naked and blind. These birds must be cared for by devoted parents until they can leave the nest and are able to feed alone and fly. Others may hatch fully clothed, alert and able to follow the parents and peck at food as soon as their down dries.

It is a gladsome thing to have birds around, beautiful in graceful flight, heart-satisfying with throbbing or lilting songs. Even in cities where strict zoning ordinances are enforced there are no complaints over the sudden influx in the spring of hundreds of small homeowners who build row houses along friendly hedges and low trees. High-rise apartments have been welcomed in the stately trees of exclusive neighborhoods. Every vacant, prefabricated knot-hole or crevice has its squatters and all are welcome.

Such hospitality can be understood for surely a mantle of good fortune lies over any greensward where there are full-throated, feathered aerialists to compose sonatas in payment for rent and to become insect exterminators to take care of their board. Humans stand dumbfounded before many wonders but perhaps none as tender as the mysterious miracle of nest-building time for the birds.

VIRGINIA WILDLIFE ☆ ☆ ☆ ☆

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

STRIPER HATCHING PROGRESSES AT BROOKNEAL. Employees of the Game Commission's Fish Division are busy hatching striped bass at Brookneal for experimental stocking in several Virginia lakes. An estimated 200,000 stripers are to be hatched here, then reared to fingerling size in state hatcheries for release in Lake Chesdin, Smith Mountain, Leesville, Claytor, Lake Kilby, Lake Meade, and other lakes, including some state lakes where shad populations are high. Some of the stripers are to be hybridized with white bass to evaluate the reportedly fast growing cross which has stirred so much excitement in neighboring Tennessee.

Additional striper fry will again be released in Smith Mountain and Leesville Reservoirs. Stocking from past years resulted in a number of stripers up to nine pounds which were caught in these lakes last summer. Hopefully, a population of big rockfish similar to that now found in Buggs Island Lake will develop in the future.

NO FISHING AT FRONT ROYAL HATCHERY. The experimental fishing program which anglers have enjoyed at the Game Commission's Front Royal Hatchery will not be continued this year. Some 16,000 people fished in the experimental ponds during the 7 years that size limit research, now concluded, was in progress. The hatchery facilities will be devoted to the production of striped bass and the new striper-white bass hybrids, plus the production of smallmouth bass and redear sunfish needed for experimental introductions.

WATERFOWL SURVEY SHOWS POPULATION DROP ON ATLANTIC COAST. The midwinter waterfowl survey conducted by the U. S. Fish and Wildlife Service in early January indicates another big decrease in wintering Atlantic Flyway waterfowl. Puddle ducks were down 7.9% and the popular diving species decreased 24.6% from totals counted last year. Canada geese, however, continued to show a slight gain.

Canvasbacks took a sharp drop, tumbling 58.4% after showing a 52.7% increase in the 1967 tally. This puts them over 50% below the long-term average, with ringnecks and ruddys in about the same shape. Divers as a group are down 30% from the long-term average. Black ducks and gadwalls were the only puddle duck species to show an increase, the rest decreasing from 10 to 30%. This brings the puddle duck group 23% below the long-term average.

Observers faced the coldest survey period in 34 years, with the coast from Virginia northward icebound. This is suspected of concentrating the birds, especially black ducks and other puddle species, where they could be more easily counted. Bad flying weather from Maryland south delayed some counts, possibly allowing birds to move from or into already censused areas.

Virginia exhibited even greater declines than the flyway in general with better than a 50% drop in both divers and puddle ducks. Canvasbacks remained fairly constant and black ducks were up as in the rest of the flyway. Fewer Canada geese were in the state than the year previous. A definite trend for more geese to winter in Maryland has been noted, with two-thirds of the flyway population counted in that state during the survey.

NORTHERNS SHOWING UP IN ORANGE LAKE CATCH. At least 7 northern pike of legal 26-inch length were taken from Commission-owned Lake Orange early this spring. These fish are from the initial stocking in 1966 now entering their third year. Northerns of the same age in Gaston Reservoir are expected to start showing up on fishermen's stringers this summer. Additional northerns are scheduled to go into both lakes this spring.

TOP T

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By HARRY GILLAM
Information Officer

EVEN THE ONES THAT DIDN'T GET AWAY ARE GETTING BIGGER

Lonnie Frazier and the 11-pound brown trout from Philpott that finally topped other entries.

ENTRIES in the Game Commission's Virginia Wildlife Trophy Fish Award Program jumped about 20% during 1967, with a total of 659 fish registered. New records were established in 8 of the 18 contest categories, and another existing record was tied by two identical 1967 entries.

The rainbow trout record was toppled three times during the year, finally yielding to Sgt. D. L. Talbott's 9 pound 14 ouncer from a Virginia Trout Company pond at Monterey. The brown trout record was exceeded first by an 8 pounder from Philpott, then an 8 pound 4 ouncer from Carvin's Cove, and finally by Lonnie Frazier's 11 pound specimen from Philpott. E. L. Blackstock grabbed the top spot in the crappie division early in the year with a 4 pound 13½ ounce speckle from Lake Conner.

Pickerel fishermen apparently had a fabulous year, turning in 159 entries, two of which tied the 7 pound record. One of the 7 pounders was taken by Jack James and the other by Fitzhugh Williams. Both came from Western Lake near Suffolk. A 7 pound 4 ounce pickerel from Buggs Island has earned Larry Kindley record holder status in 1968.

TOP 1967 FRESHWATER CITA

Fish	*No. Entries*	*Old Record*		*Where Caught*	*Best 1*
		Lb.	*Oz.*		*Lb.*
Brook Trout	0	3	2	Quantico	
Brown Trout	9	7	14¾	Jackson R.	11
Rainbow Trout	8	7	12	Todd Lake	9
Lake Trout	0	5	6	Philpott	
Carp	19	36	0	Fairfax Co.	35
Channel Cat	65	26	8	L. Brittle	21
Crappie	13	4	8	Kerr Res.	4
Flathead Cat	3	28	0	Big Island Cr.	45
Gar	6	18	8	Chickahominy L.	14
Grindle	16	17	8	Chickahominy L.	16
Kentucky Bass	0	1	12	Claytor L.	
Largemouth Bass	115	12	8	Fleshood Pd.	12
Musky	3	7	0	Smith Mt. L.	10
Pickerel	159	7	0	Lake Smith	7
Rock Bass	1	2	2	Pigg River	1
Smallmouth Bass	64	8	0	Claytor L.	7
Rockfish	75	24	12	Brookneal	28
Sunfish	90	2	10	Nottoway Co.	2
Walleye	7	17	0	New River	10
White Bass	6	2	5½	Claytor L.	2
Totals	659				

*Denotes winner of *Sports Afield* best in state award for 1967.

Four stripers taken during the year topped the previous contest record of 24 pounds 12 ounces, with James Watson's 28 pound 12 ounce lunker from Kerr Reservoir heading the list. The bass record also fell to W. L. Oliver with his 12 pound 12 ounce bigmouth from Gaston. The 64 smallmouths entered indicates that smallmouth activity was good, but the 8 pound record remained unchallenged. Sunfish activity was high in 1967 with 90 entries, none of which could top the 2 pound 10 ounce record. Frederick Gignoux of Charlottesville has put the state record out of reach in 1968 with a four pound 3 ounce bluegill from his private pond. A total of 6 white bass was the greatest number yet in this category and yielded a new 2 pound 12 ounce record, entered by John Harvey.

The 4 pound 13½ ounce crappie which topped that division was taken by E. L. Blackstock from Commission - owned Lake Conner.

Largemouth anglers keep edging the record up a little each year as did W. L. Oliver with this 12 pound 12 ouncer from Lake Gaston.

ROPHY
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ON FISH

Catch	*Where Caught*	*Angler*
Oz.		
0	Philpott	Lonnie Frazier*
4	Va. Trout Co.	D. L. Talbott*
12	Potomac R.	Ted Grefer
9	Western B.	Joe H. Johnson*
13½	L. Conner	E. L. Blackstock*
0	Claytor L.	Howard R. Shelton
12	Chickahominy L.	Alan B. Shaw
8	Chickahominy L.	John W. Haney
12	Gaston L.	W. L. Oliver*
5	Smith Mtn. L.	William S. Saunders
0	Western Br.	Jack James* and Fitzhugh Williams*
4	Powell R.	Michael Slemp
2	Philpott	Scott Simms*
12	Kerr Res.	James H. Watson
9	Private Pond	Don M. Johnson
3	Dan River	Wm. C. Shaffer*
12	New River	John D. Harvey*

Jack James' daughter hefts the 7 pound pickerel her daddy caught from Western Branch Lake to tie the state record. A 7 pound 4 ouncer from Buggs Island has since broken the old mark.

Remsen Studio photo, courtesy *Martinsville Bulletin*

Ernest Wagoner of Martinsville overshadowed all 1967 catches with this 20 pound 8 ounce Smith Mountain muskie that he caught in March of this year while crappie fishing.

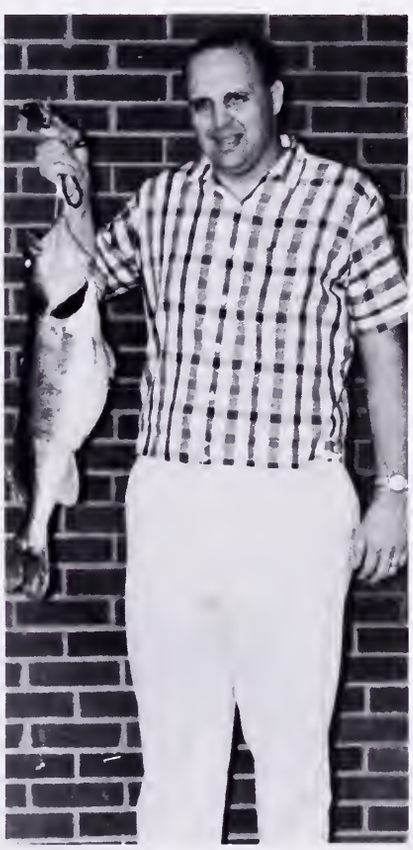
The 10 pound five ounce muskie record set early in the year was itself shattered early in 1968 by a 20 pound 8 ounce catch by Ernest Wagoner of Martinsville. The lucky angler took the big muskie on a crappie rig and managed to land him on the light tackle after a prolonged battle.

The old flathead cat record of 28 pounds was put sharply down by Howard Shelton's 45 pounder from Claytor Lake. At least one top 1967 catch, the 14 pound 12 ounce gar, was taken by an out-of-stater. Alan Shaw, a Maine school teacher and ardent trout and salmon fisherman, caught the big gar and a near twin on his first garfishing trip to Chickahominy Lake.

Each year seemingly unsurpassable records fall as anglers reel in catches from Virginia waters that their friends won't even believe after they see the fish. In the Sports Afield State Fishing Awards Program, the Virginia freshwater winners were among the top 10 caught in the 50 states, with the exception of the 10 pound 3 ounce walleye which shared 13th spot with several other states. Virginia's crappie was top dog, our largemouth and chain pickerel each ranked number two in the nation, and our channel catfish was fifth largest. Don't let anyone tell you that Virginia fish don't rank right up with the best of them!

John Haney's 16 pound 8 ounce grindle from Chickahominy Lake was the largest entered in 1967.

Thirteen-year-old John Harvey nailed himself a state record with this 2 pound 12 ounce white bass from the New River.



William C. Shaffer of Danville took the best walleye of the year, a 10 pound 3 ouncer from the Dan River.

Frederick Gignoux set a new state record for 1968 which sunfish anglers will have a hard time beating with this 4 pound 3 ounce bluegill from his farm pond near Charlottesville.

THE DAY THE REDWINGS STOLE THE SHOW

By ROBERT B. BELTON, JR.
Manassas

A FEW days of increasingly warm weather had caused my fishing bug to get a little restless. Though the wind was still blowing cold and soaking rains were holding back efforts to get outdoors, the touch of spring was showing signs of a major offensive with each passing day.

After a couple of false starts, Operation Warm-Up began, and the temptation was too great. I was fortunate enough to get the afternoon off, so at 2 p.m. I startled my wife by showing up and announcing: "Let's go fishing!" Always prepared for the unexpected, she replied with a spritely "OK," and off we went to a little farm pond about ten miles from our townhouse in Manassas. We drove by the Manassas National Battlefield Park and took Route 29/211 south to an unpaved road that led us through rolling countryside dotted with farms. At one point, we passed some Civil War earthworks that a local resident tells us still yields relics of the fierce struggles that immortalized the words "Manassas" and "Bull Run."

From the time we turned onto the private road leading to the pond, interesting things began to happen. Within the first 200 feet we topped a slight rise and completely unscrambled an orderly squad-sized formation of quail marching in the warm sun. To our mutual relief, they managed to escape our surprise attack with no casualties and scattered into the woods, badly in need of regrouping.

Without further mishap, we parked the car and walked the remaining 50 yards to the pond. A rickety wooden bridge, about 20 feet long, leads from the east bank to a small island. This island, no bigger than 15 by 40 feet, is relatively free of underbrush and provides the only suitable place for fishing. Marshy banks or tangles of blackberry vines, intermingled with small cedars, prevent access from the rest of the circumference. In spite of the recent rains, the water was relatively clear, and anticipation of an afternoon's fun began to mount.

Two factors were to be considered, though, in relation to catching some scrappy bluegill or a nice sized bass. First, we were pushing things a bit as far as water temperature was concerned. Chances were it was still too cold for the fish to perk up enough to provide good sport. Secondly, a breeze blowing from 30° east or west of north would blow the fishing lamp out in this pond as if by magic, and, as luck would have it, this breeze sprang up shortly after our arrival.

The balmy weather enticed us to try to defy the breeze and its dilatory effect, and we decided to settle back and enjoy the surroundings. The sounds alone were enough to fascinate us for hours. A couple of deep throated bullfrogs provided the bass for our symphony, even though a few younger frogs provided comic relief with sounds that mimicked those of young male humans whose voices were changing. A whip-poor-will chimed in occasionally to add some treble, and a woodpecker on the other side of the pond more than adequately represented the percussion section. The show stealers, however, were the redwinged blackbirds who alternated a somewhat raucous screech (a woodwind with a bad reed?) with a throaty flute-like song of great beauty.

These beautiful blackbirds, some 10 of them, flitted about with great abandon, preening themselves and causing terrible commotion among the cattails in the shallows. The sleek bodies of both males and females glistened in the sun as they cavorted at ground level, but the real show was on when the males flapped their wings or flew from perch to perch. The red and buff coloration they showed off during their antics contrasted brilliantly against the black background of the rest of their bodies, and they became whirling dervishes of color in flight as they exposed the brilliance partially hidden under their wings. Outlined against the blue sky or an occasional cloud or flitting in and out against the ocher of the still wintry slopes, they provided a spectacle of much delight after a long cold winter.

Most of the males were content with just showing off or rough-housing in the reeds and cattails. By contrast, however, one very practical female searched diligently for food along the nearby bank, possibly preparing herself for the rigors of feeding a brood of youngsters. Our presence within 25 feet of her didn't disturb her efforts for over an hour; finally she flew unconcernedly to a nearby pine and continued about her business. Meanwhile, her male counterparts hopped in and around, over and under the branches of bushes opposite our vantage point, entertaining us with their grace and quickness. Mostly they staged individual shows, oblivious of their audience, but this they varied by staging mock dogfights and even flying in formations of two or three.

Time was growing short, and soon we prepared to leave our fabulous outdoor theater. Coincidentally, the performances came to an end at this time and, as if sensing our impending departure, the birds left all at once, putting on one final dazzling display against the early evening sky. Somehow, we didn't mind at all that we didn't get so much as a nibble from the uncooperative fish.

Where and When the Lucky Anglers Fished

By ANN PILCHER
Editorial Assistant

"FISHING'S great" was the verdict of SHENANDOAH RIVER smallmouth and bream anglers in late May, early June, and last half of September, 1967, according to regular reports sent to Commission headquarters by Game Warden J. W. Simpson of Front Royal. But dingy waters, thinly coated with algae, kept mid-June through early September catches light. Though North and South Fork anglers often fared better than Main Stem sportsmen, Main River creels were crowded with late April crappie, while good North and South Fork hauls held off till fall. Best catfish action appeared the last week of May and returned for three weeks in September and October. Spawning carp provided targets for excellent bow and arrow shooting the last week of May, Main River hook and line carping good in late April, last half of September and mid-October. North and South Fork anglers rated rock bass fishing good the last half of April and again the second week of October, after muskellunge, believed to be stripping lures from redeye tackle, were blamed for poor early autumn fare. Area TROUT STREAMS, closed for restocking the second week of May, produced excellent yields the following week, good strings in early June, with nothing more to brag about until after November stocking. At least one angler took his limit two days before Christmas. Simpson believes the Shenandoah area had its best fishing season in a half dozen years.

Excellent or near excellent ratings were given April RAPIDAN's fish-for-fun trouting by Madison warden R. S. Crigler. Late May and mid-July catches continued good. A September report sized brookies at 8"-10" in length, rainbows running 18" to 19". STAUNTON RIVER trout action, good to excellent the last half of April, good late in May, held fair other weeks. Fish-for-fun season, requiring anglers to use single barbless hooks and to return all trout to the water, closed October 15.

D. R. Miller credits periodic in-season stockings for BULLPASTURE and UPPER JACKSON RIVER trout anglers' smiles most of the season. The Bath County-based officer reported that excellent early April catches dropped slowly to poor in mid-May, but a June 2 restocking shot yields back to excellent for two weeks. Upper Jackson catches were outstanding the first week of July through first week of August, late August, last of September and mid-October. Good or excellent LOWER JACKSON catches dominated June, first half of July and mid-September.

Records show that catching fish is largely a matter of being in the right place at the right time.

Commission photo by Kesteloo

Commission photo by Kesteloo

Generally largemouth bass were hungry in May and October.

More than 75% of COWPASTURE'S anglers took smallmouths the first week of June and third weeks of both July and August—an excellent score. Eleven weeks scattered randomly from April through October brought good smallmouth yields, but Cowpasture sunfish fans had the most fun of all. Excellent catches were tallied in mid-April, late May through most of August, third week of September and second week of October (16 of the 27 reporting periods). Other weeks, except in mid-May, brought good yields. Rock bass catches were almost as numerous—holding excellent 12 weeks, mainly June through August; good strings taken in September and October.

The State's second daily-fee trout fishing facility, DOUTHAT LAKE near Clifton Forge in Bath County, received Game Commission-released trout from its Williamsville Hatchery at a rate comparable to the number taken by fishermen, resulting in excellent trout creels all season. One of Don Miller's April reports included information that three-quarters of the lake's fishermen were taking their limit of 5 each day. Sunfish catches from the lake were excellent also, in late June and early August.

Though small in size, bream in abundance was LAKE BACOVA's banner for April, early June, July, and part of August. Only once—in mid-May—did catch figures drop. Twice during the season largemouth bass anglers claimed good luck—last of May and third week of July. Other weeks through September catches were fair. Smallmouthers at Bacova boasted good creels the second weeks of June and September.

Pulaski County's 4,485-acre CLAYTOR LAKE received no excellent ratings from Warden Don A. McLeod, but anglers did well for sunfish from mid-April through mid-September, for white bass during April, early May and most of August. Crappie takes were mostly good from mid-April through the third week of June; catfish, good mid-June through the third week of August and again halfway through September. Walleyes struck in fair numbers all season, except for a three-week July slump. Bow and arrow carp catches were good the second and third weeks of June; largemouth catches, largely fair from mid-April through first week of September. (Continued on following pages)

SOME VIRGINIA STREAMS THA

	LARGEMOUTH BASS	SMALLMOUTH BASS	SUNFISH	PICKEREL	STRIPED BASS	CRAPPIE
APRIL	Smith Mountain L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Blackwater R. Nottoway R.	Shenandoah R. Cowpasture R. S. Holston Res. Smith Mtn. L.	Shenandoah R. Cowpasture R. L. Bacova Claytor L. S. Holston Res. Smith Mtn. L. Leesville Res. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Blackwater R. Nottoway R.	Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes	Chickahominy R. Mattaponi R. Pamunkey R.	Shenandoah R. Claytor L. S. Holston Res. S. Fk. Holston R. Philpott Res. Smith Mtn. L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Rappahannock below Fredericksburg
MAY	L. Bacova Philpott Res. Smith Mtn L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suff. Lakes Nottoway R. Dragon Run	Shenandoah R. Cowpasture R.	Shenandoah R. Cowpasture R. L. Bacova Claytor L. New R. S. Holston Res. Philpott Res. Smith Mountain L. Upper James R. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suff. Lakes Blackwater R. Nottoway R. Dragon Run	Diascund Res. Chickahominy L. Chickahominy R.	Staunton R. Gaston Res.	Claytor L. S. Holston Res. Smith Mtn. L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Norf. & Suffolk L.
JUNE	Smith Mtn. L. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Chickahominy R. Nottoway R. Rappahannock below Fredericksburg	Shenandoah R. Cowpasture R. L. Bacova	Shenandoah R. Cowpasture R. Douthat L. L. Bacova Claytor L. New R. S. Holston Res. Philpott Res. Smith Mtn. L. Leesville Res. Pigg R. Lower James R. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Blackwater R. Nottoway R. Mattaponi R. Pamunkey R.	Chickahominy L. Chickahominy R.	Kerr Res. Mattaponi R. Pamunkey R. Rappahannock below Fredericksburg	Claytor L. S. Holston Res. Holston R. Diascund Res. Chickahominy L. Norfolk & Suffolk L.
JULY	L. Bacova Kerr. Res. Gaston Res. Lower James R. Cks. Chickahominy L. Chickahominy R.	Cowpasture R. Upper James R. Rappahannock above Fredericksburg	Cowpasture R. Douthat L. L. Bacova Claytor L. New R. S. Holston Res. Smith Mtn. L. Leesville Res. Lower James R. Diascund Res. Chickahominy L. Chickahominy R. Norfolk & Suff. Lakes Blackwater River Nottoway R. Mattaponi R. Pamunkey R.	Chickahominy L. Rappahannock above Fredericksburg	Kerr Res. Piankatank R.	S. Holston Res. Norf. & Suffolk Lake
AUGUST	Chickahominy L. Chickahominy R.	Cowpasture R. Rappahannock above Fredericksburg Rapidan above Rappah. junction	Cowpasture R. Douthat L. L. Bacova Claytor L. S. Holston Res. Upper James R. Lower James R. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Nottoway R. Mattaponi R. Pamunkey R.	Chickahominy L.		S. Holston Res.
SEPT	S. Holston Res. Lower James R. Creeks Diascund Res. Chickahominy L. Chickahominy R.	Shenandoah R. Cowpasture R. L. Bacova Upper James R.	Shenandoah R. Cowpasture R. Douthat L. L. Bacova Claytor L. New R. S. Holston Res. Upper James R. Diascund Res. Chickahominy L. Norf. & Suffolk Lakes Blackwater R. Nottoway R.	Diascund Res. Chickahominy L. Chickahominy R. Blackwater R. Mattaponi R.	Lower Rappahannock R. Piankatank R.	Shenandoah R. S. Holston Res. Smith Mtn. L. Leesville Res. Kerr Res. Gaston Res. Norf. & Suffolk Lake
OCT	Smith Mtn. L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Chickahominy R. Norf. & Suffolk Lakes Rappahannock R. below Fredericksburg	Shenandoah R. Cowpasture R. Rappahannock above Fredericksburg	Shenandoah R. Cowpasture R. Douthat L. L. Bacova Chickahominy L. Norfolk & Suff. Lakes Blackwater R. Nottoway R.	Diascund Res. Chickahominy L. Chickahominy R. Pamunkey R.	Lower Rappahannock R. Piankatank R.	Shenandoah R. Smith Mtn. L. Leesville Res. Kerr Res. Gaston Res. Diascund Res. Chickahominy L. Back Bay Norf. & Suffolk Lake Nottoway R.

YIELDED GOOD OR EXCELLENT CATCHES IN 1967

TROUT	CATFISH	CARP	WHITE PERCH	ROCK BASS	HICKORY SHAD	WHITE BASS
Rapidan R. Staunton R. Bullpasture R. Jackson R. Douthat L. Big Tumbling Ck. Smith R. Dan R.	S. Holston Res. Lower James R. Chickahominy R. Blackwater R. Nottoway R. Rappahannock below Fredericksburg	Shenandoah R. S. Holston Res. Upper James R. Lower James R. Diascund Res.	Upper James R. Lower James R. Blackwater R. Nottoway R. Rappahannock below Fredericksburg Piankatank R. Dragon Run	Shenandoah R. Cowpasture R. S. Holston Res. Rappahannock above Fredericksburg	Nottoway R. Mattaponi R. Pamunkey R. Rappahannock below Fredericksburg	Claytor L.
Shenandoah Area Streams Rapidan R. Staunton R. Bullpasture R. Jackson R. Douthat L. Big Tumbling Ck. Smith R. Dan R.	Shenandoah R. Upper James R. Lower James R. Blackwater R. Nottoway R. Rappahannock below Fredericksburg	Shenandoah R. Smith Mtn. L. Lower James R.	Lower James R. Chickahominy L. Chickahominy R. Blackwater R. Nottoway R. Lower Rappahannock R. Piankatank R. Dragon Run	Cowpasture R. Chickahominy L. Rappahannock above Fredericksburg	Mattaponi R. Pamunkey R. Rappahannock below Fredericksburg	Claytor L. S. Holston Res. S. Fk. Holston R.
Shenandoah Area Streams Bullpasture R. Jackson R. Douthat L. Big Tumbling Ck. Hidden Valley L. Smith R. Dan R.	Claytor L. S. Holston Res. Staunton R. Kerr Res. Gaston Res. Upper James R. Lower James R. Chickahominy R. Blackwater R. Nottoway R. Rappahannock below Fredericksburg	Claytor L. S. Holston Res. Lower James R. Rappahannock below Fredericksburg	Lower James R. Mattaponi R. Pamunkey R. Lower Rappahannock R. Piankatank R. Dragon Run	Cowpasture R. New R. S. Holston Res.		
Rapidan R. Bullpasture R. Jackson R. Douthat L. Staunton R. Big Tumbling Ck. Smith R. Dan R.	Claytor L. New R. Leesville Res. Pigg R. Staunton R. Kerr Res. Gaston Res. Lower James R. Chickahominy R. Norfolk & Suffolk L. Blackwater R. Nottoway R. Mattaponi R. Pamunkey R. Rappahannock below Fredericksburg	Smith Mtn. L. Leesville Res. Pigg R. Staunton R.	Lower James R. Chickahominy R. Back Bay Mattaponi R. Pamunkey R. Piankatank R. Dragon Run	Cowpasture R. Rappahannock above Fredericksburg		Claytor L. New R.
Bullpasture R. Jackson R. Douthat L. Big Tumbling Ck. Smith R. Dan R.	Claytor L. S. Holston Res. Kerr Res. Gaston Res. Lower James R. Chickahominy R. Blackwater R. Nottaway R. Rappahannock below Fredericksburg	S. Holston Res. S. Fk. Holston R. Blackwater R. Nottoway R.	Lower James R. Chickahominy R. Back Bay Mattaponi R. Pamunkey R. Piankatank R. Dragon Run	Cowpasture R. New R. Rappahannock above Fredericksburg Rapidan above Rappahannock junction		Claytor L.
Bullpasture R. Jackson R. Douthat L. Smith R. Dan R.	Shenandoah R. Claytor L. Upper James R. Lower James R. Chickahominy L. Chickahominy R. Nottoway R.	Shenandoah R.	Lower James R. Chickahominy R. Piankatank R. Dragon Run	Cowpasture R.		
Bullpasture R. Jackson R. Douthat L. Smith R. Dan R.	Shenandoah R. Lower James R. Chickahominy L. Chickahominy R.	Shenandoah R. Rappahannock below Fredericksburg	Lower James R. Piankatank R. Dragon Run	Shenandoah R. Cowpasture R.		

EXPLANATION OF TERMS

Term	*Angler Success*
Excellent	Over 75%
Good	50-75%
Fair	25-50%
Poor	0-25%

Lucky Anglers (Continued from page 17)

Most frequent strikes for Claytor's parent stream, NEW RIVER, came from sunfish—in May and June, mid-July and first week of September. The river also allowed good strings of catfish in July, rock bass first week of June, first and third weeks of August. Crappie and walleye fishing was discouraging(crappie having a fair week in late April, walleye in late July). Largemouth catches, fair in late June, early and late July, were otherwise poor. Smallmouth creels, fair most of the season, turned poor from the second week of September through season's end. White bass anglers took fair strings in mid-April and claimed a good fifth week of July.

Third weeks seemed significant in Roy A. Smith's Southwest Virginia reports. HOLSTON RIVER crappie creels were good in the South Fork the third week of April; good in all forks during June's third week. Except for a poor third week in July, sunfish strings were fair all season. Catfish and carp catches rated fair 14 weeks, most consistently in late May through June's third week and during August. Sucker and rock bass success through mid-June was fair, poor most weeks thereafter. April through September brought meager largemouth and smallmouth creels, but October found bass catches picking up.

Generally, SOUTH HOLSTON RESERVOIR's yield was rated slightly higher than river creels. Excellent crappie fishing came in mid-April and mid-June. Early June produced lots of carp. Seasonal large- and smallmouth bass fishing was fair. Sunfish and crappie angling produced good strings mainly, though mid-June through mid-July sunfish catches dropped to fair. Last of April, all of June and first week of August yielded good catfish and sucker strings. Good in mid-April and all of June, other rock bass fishing was fair; all walleye fishing poor. South Fork and Holston Reservoir white bass catches the last week of May were good; Middle and South Fork catches fair most other weeks through June.

Washington County HIDDEN VALLEY LAKE trout catches, off to a poor start in mid-April, rose slowly to good the first week of June, but the catch dropped drastically with the next report and didn't improve until mid-August.

Trouters in Holston AREA STREAMS found fishing fair through the third week of June, poor afterwards. Pay-as-you-go BIG TUMBLING CREEK trout catches were excellent in late April and most of July, dropping to good other weeks through August.

In Henry County DAN and SMITH RIVER anglers boasted excellent trouting the second and third weeks of May, early July, and second week of October. For eight consecutive weeks, beginning third week of July, Patrol Leader E. T. Lemons reported trout yields good.

Largemouth, sunfish and crappie strings from PHILPOTT and MARTINSVILLE RESERVOIRS were small most of the season, but the fourth week in May offered both largemouth and sunfish anglers at Philpott good action, with "sunny" creels good also in June. Mid-April brought Philpott's best crappie week, a few smallmouths and "cats" constituting other Philpott fare.

In west-central Virginia, anglers in LEESVILLE and SMITH MOUNTAIN LAKES—Appalachian Power Company's joint 23,500-acre hydroelectric facility—took good strings of largemouth bass from April through May and again in October. But J. D. Whittaker, Patrol Leader living in Penhook, figures Smith Mountain pulled slightly ahead of Leesville with another three good weeks in June. Mid-April Smith Mountain smallmouth creels were good, sunfish biting well then and from the last of May through mid-July—good most of that time in Leesville. Crappie take, good April through May in Smith Mountain, most of that time at Leesville, was only fair for the next 3½ months, catches greatly improving in mid-September. Smith Mountain early-season trout and June-July catfish ratings were fair; excellent carp action came the third week of July. Anglers in both lakes produced good carp catches the last week of May and rest of July.

STAUNTON (ROANOKE) RIVER largemouth success was fair from mid-April through the first week of July, sunfish strings good from mid-June through late July. Striped bass spawning run, starting the third week of April, brought good catches in mid-May, but early June "rock" strikes were scarce. Best crappie catches came by April's end, though the river yielded a few through June and in the fall. Mid-June and mid-July were good for catfish, July also good for carp.

Rated fair most of the season, PIGG RIVER's sunfish catches rose to good the second week of June, poorest strings reported a month later. Good Pigg "cat" fishing came in mid-July; good carp catches later that month. April saw fair sucker, poor walleye action.

Mid-April and early May brought excellent largemouth fishing to KERR RESERVOIR; good catches to GASTON. Dropping to fair after July, largemouth action improved again in early October. Though mid-summer action was slow, plastic worms fished in 10 to 20 feet of water early morning and later afternoon brought best results. Kerr and Gaston Lake crappie strings, excellent the second week of April, good for three more weeks, then fair and poor, made news again in mid-September through October, catches of as many as 100 fish per string quite common, according to Patrol Leader G. P. Simmons. Good catfish strings were mentioned by Kerr and Gaston anglers for a month beginning the second week in June, good also in mid-August.

Gaston striped bass yields progressed from poor in April to good the third week of May when the State record was broken twice, rock up to 28½ pounds pulled from the lake's upper end. Late May, early June and first half of July brought fair rock catches. Kerr's two good striper weeks were recorded the third week of June—when trollers began taking rock in the middle of the lake—and the first week of July. Later July catches were fair to good. Poor in August and September, rock catches in both lakes picked up in October, fish still lunker size.

J. T. Newman's UPPER JAMES RIVER reports covered mainly the Columbia to Cartersville area, in Cumberland County. Largemouth catches, poor from April into July, improved slightly in later reports. Spring smallmouth catches were poor. The third week of July and second week of September brought good strings, but most other summer and fall catches were just fair. Sunfish creels were good the last week of May, and from mid-August through mid-September. Pickerel and crappie anglers had nothing to brag about all season. Catfish action proved excellent the last week of June, good last week of May and first week of September. Carp and white perch fishing was best the last week of April; sucker strings fair in April.

Early season LOWER JAMES RIVER largemouth catches alternated between poor and fair, consistently fair late June through mid-August, most of September and half of October. Largemouths were pulled from tributary creeks in good numbers the last half of July and end of September. Small-

mouth catches, mentioned only in the spring by New Kent's R. L. Griffith, were spotty. Sunfish creels, fair during May and most of June, were good late June through mid-July and again the first half of August. Seasonal pickerel, striped bass, and crappie action remained poor, while catfish and white perch anglers had good results most of the time, especially from April through mid-August. Late July and third week of August were excellent for "cats"; carp catches, good April through June.

At New Kent County's 1700-acre DIASCUND RESERVOIR largemouth fishing proved good the last two weeks of April, mid-May, most of June, first and last weeks of September and October. Half of July and early September excepted, sunfish strings were good mid-April through mid-October. The third week of April brought exceptional pickerel and crappie returns; good pickerel strings coming other weeks of April, May, late September and October; good crappie creels in May, June and October. Mid-April rated best for carp. April and late July added a few "cats" to the creel.

CHICKAHOMINY RIVER largemouth action, good April through mid-May, peaked the last week in June, but July through October continued to bring many good catches. With only three exceptions, sunfish strings from mid-April through early August were good. Good pickerel strings were reported each month except July and August. April through October crappie angling was fair, and catfish fans consistently did well from June through August—"cat" tempo picking up again late in September. White perch fishers had best results in early May, July, first half of August and early September.

CHICKAHOMINY LAKE largemouth reports were good most of the season. Exceptionally fine in mid-April and portions of August, sunfish creels were good all other weeks. Pickerel action, starting slow in early season, worked to a crescendo of excellent catches the first week of October. Crappie anglers did well April-June and October. Fair in April, poor May through August, catfish action rocketed suddenly to excellent the first week of September, followed by good catches in September and October.

BACK BAY's only good 1967 fishing came in mid-October for crappie, late July and August for white perch, reported Patrol Leader W. E. Lankford. Once famous for largemouths, the 25,000-acre bay yielded fair bass and bream catches during April and May and a few more sunfish in mid-July and October. Fair, too, was pickerel action in mid-April and mid-October. Crappie strings were poor from June through early September; catfish, fair or poor all season.

Clear-water lakes Prince, Kilby, Meade, Cahoon and Smith—NORFOLK and SUFFOLK CITY WATER WORKS RESERVOIRS—provided good largemouth angling the second week of April, most of May and mid-October. Sunfish strings were good all season; pickerel mostly fair, with a good week in mid-April. Good crappie weeks were widely scattered: Mid-April thru mid-May, late June thru early July, late September and mid-October. Although fair most of the season, late July catfish action was good.

Seasonally, BLACKWATER and NOTTOWAY RIVERS' largemouth, pickerel, and crappie catches were fair, but April, May and June brought scattered good largemouth, August brought poor crappie, reports from the Nottoway. But sunfish devotees did well on both rivers except the Nottoway in August, and catfish enthusiasts were more than satisfied from April through mid-August. Mid-April through mid-May lines produced good white perch strings, fair catches continuing well into June. Nottoway's early April anglers took a few striped bass, and its carpers did well in August.

Except for four scattered weeks of poor catches C. T. Bland reported MATTAPONI and PAMUNKEY RIVER largemouth fishing fair all season. Strong sunfish angling came the last week of June, mid-July, and early August. Late September through mid-October was a productive pickerel period, second week of April and last of June best for stripers. Catfish creels reached good the first week of July; white perch, good late June through most of August. Many hickory shad showed up in late April and early May, particularly in the Aylett area. King and Queen pond and creek fishing was rewarding all season.

ABOVE FREDERICKSBURG, RAPPAHANNOCK RIVER smallmouth angling was good the second week of July, second week of August and first half of October. April, May, July, August and October each provided one or two weeks of good sunfish yields, while other better-than-fair catches were made in mid-July for pickerel; late April, early May, mid-July and mid-August for rock bass. On the second weekend of April several hundred dipnetters at Fredericksburg reported an excellent harvest of herring, according to Area Patrol Leader F. C. Boggs. The fourth week of May also brought unusually large herring catches in the shallows above Falmouth. Last half of April and early May saw good hickory shad, fair white shad fishing from the Falmouth bridge and in the vicinity of VEPCO's Power Station. The second week of August excellent smallmouth, good bream and rock bass hauls were enjoyed from the RAPIDAN ABOVE RAPPAHANNOCK JUNCTION.

In tidal RAPPAHANNOCK BELOW FREDERICKSBURG, largemouth catches were good the third week of June and second week of October; fair April, early May and other scattered weeks. Sunfish strings were best late April through mid-August; striped bass, caught mostly on small eels, good the third week of June. Good only the second week of April, crappie creels were fair through May and last half of September; catfish strings, good or excellent all season. Carpers found first and third weeks of June and second week of October excellent for their sport. Outstanding catches of good-sized white perch came the second week of April and continued good the rest of the month. By mid-May the perch run was about over, but a few large individuals still appeared in anglers' creels.

LOWER RAPPAHANNOCK and PIANKATANK RIVER reports showed consistently fair striped bass strings from mid-April (especially around creek mouths and on grassy flats) into September. In late September excellent numbers of small- to medium-sized rock were taken by floating soft crab; good October catches followed. Except for late July and mid-August, Piankatank and DRAGON RUN anglers made good white perch catches all season. Dragon pickerel strings remained fair all season, ring perch action good the second week of May. Good the third week of May, bream catches were otherwise fair through August. Late April and May largemouth strings were fair to good; September and October largemouth and crappie, fair. Gray trout showed up in commercial fish nets in Chesapeake Bay in early May, but not until late July did Rappahannock and Piankatank bottom fishermen report excellent catches of both trout and spot, hauls of 150-200 spot not unusual. Best spot fishing in five years, said warden B. U. Miller of Amburg, in Middlesex.

ENJOY, DON'T DESTROY OUR NATIVE PLANTS

By DR. A. B. MASSEY
Virginia Polytechnic Institute

SKUNK cabbage bloomed in late February and March! The tiny stemless flowers developed among the dead leaves of last year as clusters on a rounded fleshy stalk enveloped by a fleshy, ill-smelling, purple spotted, hood-like spathe—an arrangement similar to the more familiar jack-in-the-pulpit but very short stalked and near the ground.

In early March hepaticas bloomed on warm slopes, buds of silver and red maples swelled to burst into reddish flower structures, and grassy areas blossomed in spring beauty. Now, as milder open weather of spring and summer develops, one feels the urge to wander in the out-of-doors looking for herbs and shrubs in flower. Do not cut or dig native plants thoughtlessly. Enjoy them by wise use.

Do not pull the flowers of, or in any way disturb, the native plants which are not abundant in the region; in addition, be conservative and not wasteful of plants and flowers which are abundant. A large colony in a place does not indicate abundance in the region. Gather for a particular purpose, and protect what you have gathered so that they will not wilt or be spoiled for your use.

Do not pull all, or even most, of the leaves on a plant when gathering flowers. Remember that the leaves serve as the "kitchen" of the plant. They prepare a large portion of the food required by the roots and other parts of the plant. When one gathers the flowers of yellow lady's slipper, or wild lilies, most of the leaves are taken, thus weakening the roots and remaining parts.

Do not pull all the flowers of a plant. After the flowers come the seed; therefore, always leave enough leaves for a good crop of seed. Seed are important for the perpetuation of the species. Also bear in mind that seed of native plants

The hardy skunk cabbage bloomed two months ago.

OBITUARY FOR AN ORCHID

By DR. J. T. BALDWIN, JR.
Williamsburg

SHOWN here are flowering (May 14, 1965) and fruiting (June 15, 1964) specimens of the "Small Whorled Pogonia" (*Isotria medeoloides*), one of the rarest orchids in the eastern United States. These plants grew at the only station known in Virginia: approximately three miles northwest of Williamsburg in James City County where this orchid was found by Professor E. J. Grimes of the College of William and Mary in 1920. Members of the Department of Biology have observed the species there in association with *Isotria verticillata* ever since.

Now these plants are doomed. Their habitat in a mixed hardwood and pine woods is to become the site of human habitation, as a small part of an extensive housing development. And this is symptomatic of what man is doing to the Peninsula of Virginia.

Two accompanying photographs were made in the studios of Colonial Williamsburg.

are often nature's provision for food for wildlife.

Do not transplant native plants thoughtlessly. Consider carefully the environment in which you find the plant thriving. Can you give it the same conditions on your home grounds? Plants which have grown in their native haunts often have spreading root systems, hence cannot be as readily transplanted as can nursery plants which usually have a more clustered root system.

Do not destroy the vegetation over an area by clearing, burning, or draining before considering the probable effect upon the soil, the surface of the area, the underground and surface water, and upon wildlife. Avoid needless destruction and too severe an upset of nature's balance.

Do not cut shrubs or use native plants for mass decoration. Be moderate with the use of holly and other evergreens at Christmas time. Use lights and man-made materials for mass decoration, and be conservative with the evergreens. In the space of a few seconds man severs the life stream of a tree or shrub that nature has slowly developed over a period of years.

Help others to acquire a true appreciation of native plants and set the example by following a program of conservation. Appreciation follows understanding. By encouraging plant study we can insure that others will develop an interest in and a love for our native plants.

Preserve and protect interesting plant habitats and natural areas. Through the activity of clubs or other groups, hunt out unspoiled areas where one finds an unusual assortment of native plants. In places of this kind establish a *native plant garden*, if the area is small, or a *plant reservation* over a large area, thus preserving typical vegetation as well as species of plants. Introduce other native plants of the surrounding region. Use such areas primarily for educational purposes in clubs, schools and for the public.

He Has the Proof

By OZZIE WORLEY
Roanoke

FOR a Roanoke fisherman's money, Craig Creek in Craig County cannot be topped for smallmouth bass and chain pickerel—especially the latter.

This angler, Chet Cooley, has come up with his own method of backing up his stories about the size of fish he catches in this creek, as well as in other streams.

If a fish is worth remembering—or bragging about—Cooley grabs a pencil and a slab of plywood as soon as he gets home with it. He lays the fish on the plywood and traces its shape with the pencil.

After this, using either a jig-saw or a coping saw, he cuts out the form of the fish that he has outlined.

Then, Cooley's son, Mike, paints on the eyes, jaw indentures and other characteristics of the fish. Mike, himself an avid fisherman, is a student at old Dominion College in Norfolk.

The cut-out of which Cooley is proudest is of a 24-inch pickerel (he refers to it as a "pike") that he reeled from Craig Creek. This fish weighed 3½ pounds.

Rating almost as high with Cooley as his "pike" is a cut-out of a native brook trout that was 12 inches long. Although he was quick to say where the pickerel was caught, he reneged on identifying the stream that yielded the native. "Just say it was somewhere in Virginia," he suggested.

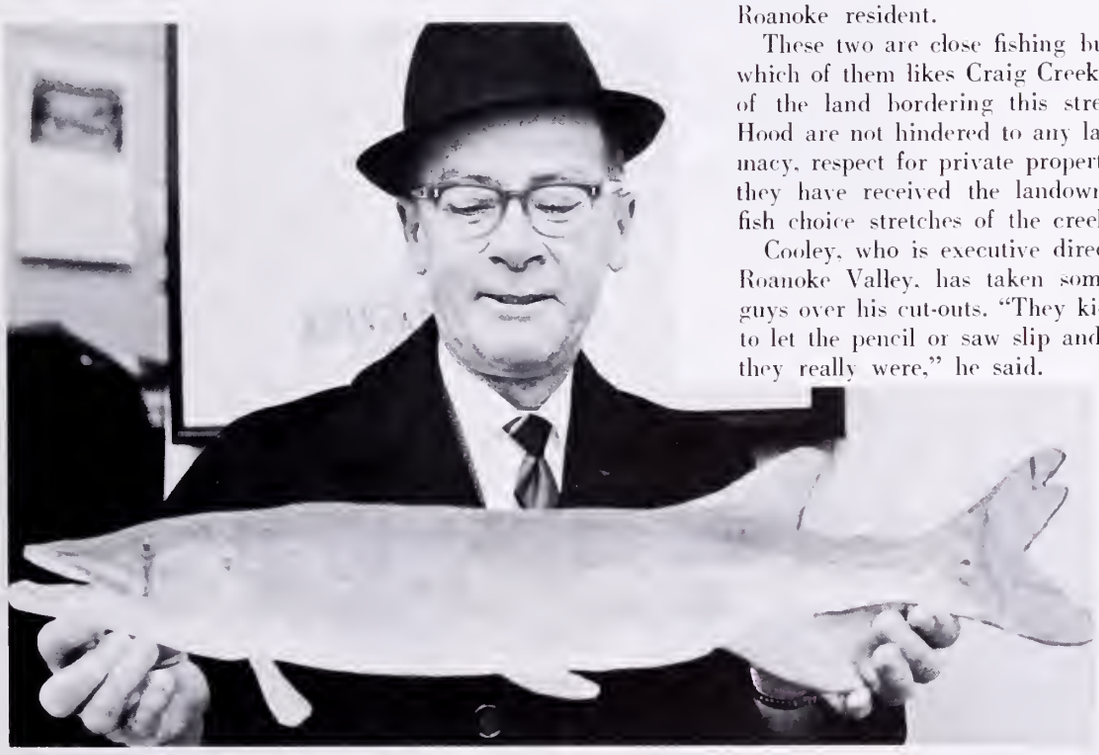
The pickerel and trout cut-outs, plus one of a 4½-pound smallmouth bass—the latter caught in Licking River in Kentucky—all grace the walls of the family room in the Cooley home.

He has also helped a fellow fisherman to preserve his memory of a good catch. He did a cut-out of a 3½-pound smallmouth bass landed by Horace Hood, III, also a Roanoke resident.

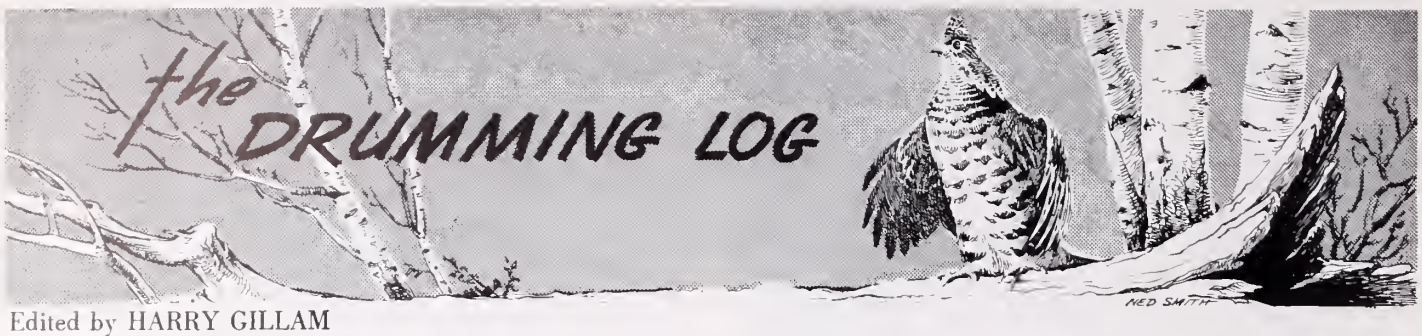
These two are close fishing buddies, and it's hard to say which of them likes Craig Creek the better. Although much of the land bordering this stream is posted, Cooley and Hood are not hindered to any large degree. Through diplomacy, respect for private property and good sportsmanship, they have received the landowners' written permission to fish choice stretches of the creek.

Cooley, who is executive director of the United Fund of Roanoke Valley, has taken some ribbing from some wise guys over his cut-outs. "They kid me that it would be easy to let the pencil or saw slip and make the fish bigger than they really were," he said.

He'd debate that charge vigorously. Anyway, he said, his method beats the high cost of having fish mounted by a taxidermist.



Chet Cooley and cut-out of his pickerel to remember. He has the proof!



Edited by HARRY GILLAM

The Archer's Bible

A new and complete reference on archery written by Fred Bear, well known archery equipment manufacturer and bowhunter, is now available at news stands and sporting goods outlets. Called the *Archer's Bible*, the 160 page book delves into most facets of the sport that beginning or advanced archers need to know.

Starting with the selection of equipment, both for hunting and target shooting, the book progresses to shooting form, common faults, hunting small and large game, bowfishing, target and recreational archery, archery associations and safety. The various sections stress equipment details and technique and include many references where archery enthusiasts may write for more information.

The well illustrated text clearly demonstrates proper shooting form and graphically shows how to aim a bow, which process differs considerably from aiming a gun. The book is one of a series on outdoor sports and sells for $1.95.

The Ruffed Grouse Society of America

Many Virginia hunters are probably unaware that their state is the National Headquarters for a very improbable organization, the Ruffed Grouse Society of America, which claims Monterey as its national home base. From very small beginnings several years ago, the group has grown to nearly 500 members and is currently developing plans for state affiliate chapters. A very serious group, the society is devoted first to the study and welfare of the ruffed grouse and secondly to conservation and recreational problems which affect grouse and grouse hunters.

The group held its last annual convention at Blackwater Falls State Park in neighboring West Virginia in early September of 1967. The group plans to publish two issues of their magazine in 1968. The multi-page publication contains a wealth of information on the grouse, its management and grouse hunting, plus news of the organization. Annual dues are $10 payable to the RGSA, Monterey, Virginia 24465.

Youths Complete Hunter Safety Course

The three boys on the firing line are completing a hunter safety course under the direction of State Game Warden Irvin L. Kenyon, Jr., in Rappahannock County. The boys are, left to right, Wayne Deal, Steve Gore, and Ricky Gore. Standing behind, from the left, are H. C. Lehew, Charles Foster and Nelson Atkins, Jr., members of the Rappahannock Game and Fish Association who picked up the tab for the course including the supervised firing of 50 rounds on the range.

Conservation Bibliography for Teachers-Students

A new bibliography of Conservation Education reference materials has been published by the Conservation Education Association. Departing from the standard conservation references, this listing includes references on all aspects of man's relationship with his environment including city planning, population, and the social implications of resource problems.

Many of the publications listed take conservation problems right into the heart of our cities where they are most acutely felt. Teachers and students in metropolitan areas can find texts that hit their immediate resource problems specifically. The selections are annotated, and are graded or grouped into four categories for early elementary, middle grades, high school and for teachers and group leaders. A special "Tools for the Teacher" section, plus the "unit libraries" or "basic collections" listings both add to the utility of this bibliography.

The Conservation Education Bibliography may be ordered directly from Interstate Printers and Publishers, Inc., Danville, Illinois 61832 at $2.50 per copy. Bulk rates are available.

Fox Catch from Suburbs Indicates High Numbers

W. A. Kindervater, Secretary-Treasurer of the Virginia Trappers Association, exhibits 52 red and gray fox pelts taken within a short distance of Richmond. He was trapping at the invitation of rabbit hunters, who blamed poor success on the abundance of foxes. He offers his services to anyone interested in a fox clean-up. His address is 2415 Aiken Drive, Richmond.

Edited by ANN PILCHER

Potential Fire Fighters

Mr. Withers Whitehead, right, demonstrates use of the Smith-Indian back pack to Lovingston 4th graders Tony Seaman, holding council rake, and Ellen Wood, holding a pulaski tool. Physical Education Supervisor Jim Moyer looks on.

In addition to hunter safety instruction, another aspect of *safety afield* has been stressed recently for fourth through seventh grade Nelson County students, arranged through the cooperation of Mr. E. E. Rodger, Virginia Division of Forestry Information Chief. Fire Control measures were the subject of a three-hour course taught by Mr. Withers Whitehead, Chief Fire Warden for Nelson County, to over 1100 boys and girls. Each received a special certificate designed by Cal Arave.

Air Rifle Champions

Winners of the 2nd annual Nelson County elementary indoor air rifle championships, held last March, are pictured with Elementary Physical Education Supervisor Jim Moyer (left) and John White, president of the Lovingston Ruritan Club, which sponsored the event. Mr. White presents awards medal to Gregg Colley (front right), who stands beside other Class A winner, Annette Peverill. Tim Page and Sharon Brandt are shown in the middle row; Glen Epps and Debbie Morse, in back.

Audubon Junior Program

Five different junior programs, planned to spark children's natural curiosity about the world around them and to provide guidelines for understanding, appreciating, and conserving our natural resources, have just been developed by the National Audubon Society. Each program, available for groups of 10 or more, is suitable for classroom, Scout, 4-H, religious youth group or junior gardeners' use, and is a complete unit of study in itself. Choose *Ecology, Birds, Trees, Plants and Flowers* or *Mammals* as the topic your group wants to study, and write National Audubon Society, 1130 Fifth Avenue, New York, New York 10028, for materials.

Each child receives a booklet of at least 20 pages and an Audubon Junior Button. Ten children must be enrolled in the same program, at a cost of $.25 each; minimum order, $2.50. Additional children, in groups of four or more, may enroll in the program later in the same year by paying a minimum of $1.00, plus 25 cents for each individual child above the stated group of four. There is no extra charge for leader materials, which include a special leader's guide and a 24″ x 40″ full-color wall chart with accompanying informational text covering the subject ordered (ecology chart is larger). Materials in the various programs are available for leader evaluation at $2.00 per kit or $10.00 for all five kits.

National Audubon Society photo by Duryea Morton

Audubon Juniors absorbed in tree study.

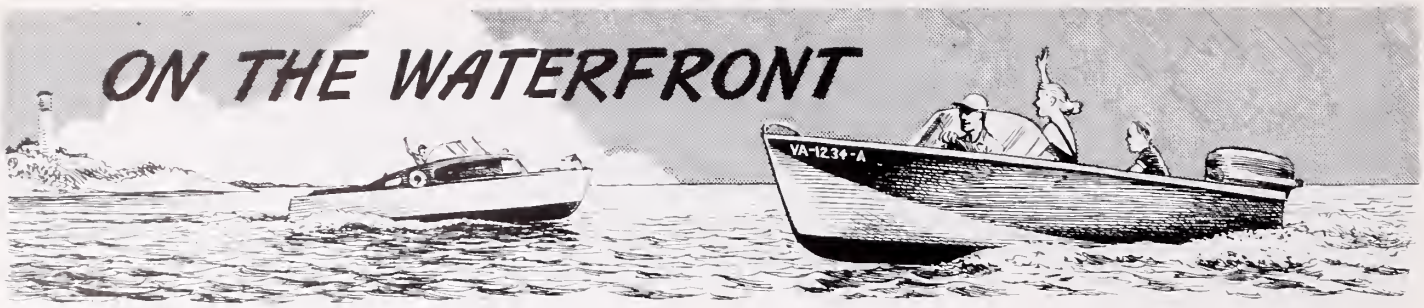
Safety Stressed for Pulaski, Chesterfield and Nelson Youths

Four hundred fifty-one eighth and ninth graders passed the February 19-23 hunter safety course conducted at Midlothian High School in Chesterfield County by Area Patrol Leader J. R. Bellamy and Wardens R. L. Griffith, J. J. Westbrook, and D. L. Montgomery. Ten boys and two girls received perfect examination scores.

All Nelson County 7th graders took the Hunter Safety Course during February as part of the county's elementary school outdoor education program. Two hundred fifty-two students, 140 boys and 112 girls, successfully completed the course. Instructors were Jim Moyer, Nelson County's supervisor of elementary physical education, State Game Wardens Lewis Brandt and Joe Cooke, and Warden Patrol Leader Ray Walker.

At right: Game Wardens R. M. Wolfenden, Jr., (left) and Donald McLeod (right) joined Area Patrol Leader W. T. Jamison in explaining to students of Newbern Elementary School the proper way to use a gun in the field. Some one hundred sixth and seventh grade boys of Dublin and Newbern Schools in Pulaski County completed the hunter safety course taught February 26-68 by these men, assisted by Warden Page Clark. Sponsor was the Dublin Ruritan Club, who contributed $.30 per pupil for purchase of safety handbooks and shoulder patches. The normally four-hour safety course, which includes target practice, was cut to three hours in this instance, due to absence of a firing area.

Pulaski *Southwest Times* photo by P. Simpkins



Edited by JIM KERRICK

Ray Palmer photo, Am. Red Cross

Do-it-yourself Safety Post for unsupervised swimming areas.

Learn Aquatic Safety, Know-How, At Red Cross Summer Schools

If you take to water like the proverbial duck, chances are you'll be glad to learn that the American Red Cross is again offering advanced training in water safety at Camp Hanover, Richmond, this summer.

According to Howard E. Camp, Jr., area director of Safety Services for the Red Cross Eastern Area, Camp Hanover National Aquatic School will be open to men and women 18 and over who are interested in improving their proficiency in swimming, lifesaving and first aid, or to qualify as Red Cross volunteer instructors in these fields. The 10-day school opens June 6.

No previous training is necessary for students desiring to become First Aid Instructors, said Camp, but candidates for Water Safety Instructor must possess a current Red Cross Senior Lifesaving Certificate or be able to perform various swimming strokes proficiently. In addition, persons who are now authorized Water Safety Instructors may enroll in the Canoeing or Handicapped Swimming electives, depending on individual needs and qualifications.

The Camp Hanover Aquatic School, like annual Red Cross National Aquatic Schools in other states, is essentially a short-term leadership training school. For this reason the training is intensive, and outstanding water safety instructors are in charge, Camp points out. All courses include a daily schedule of classes, sessions for instruction, practice, and practice teaching. Provisions are also made for a well-rounded recreation program.

"What our students learn at this unique aquatic school," said Camp, "may someday spell the difference between life and death for some of Virginia's expanding legion of water sports devotees." He suggests that interested parties contact their local American Red Cross chapters for full details and application forms. A nominal $65 fee covers room, board and supplies for the 10-day period.

Photo courtesy American Red Cross

Water safety instructors practicing rhythmic breathing at Camp Hanover.

New Boating Film Available

A new film entitled "Rx for Boating Safety and Pleasure" has recently been produced by the Virginia Commission of Game and Inland Fisheries. This film, all in color, is 28 minutes long and covers many aspects of safe boating—from registration and numbering to safety equipment, weather, rules of the road and common sense.

The film may be obtained from the Richmond Office of the Game Commission or by contacting the local Game Warden.

Loading Your Boat

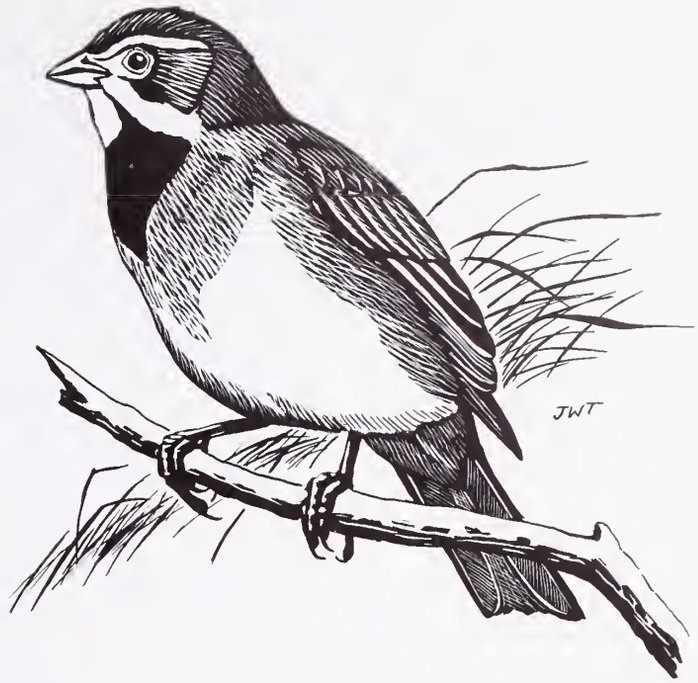
Proper distribution of your equipment within your boat is very important. In fact, every piece of equipment should have a place and everything should be in place, not thrown together. A boat with proper distribution of weight will function much better on the water, and weight distribution becomes a definite safety element in a storm or bad weather. Look at the capacity plate, which in most cases is attached to the stern of the boat. This plate will tell you the amount of weight the boat will carry safely under most conditions. Just because a boat has three seats it does not mean it will safely carry six people. Take into consideration the weight of your motor, the weight of your battery, if electrically started, weight of all other equipment, plus the weight of your passengers. If the combined total of all this exceeds the recommended weight for that boat, someone should be left behind for safety. After loading, look at your freeboard; and if you have only two or three inches, it is recommended that you not go out until you have gotten rid of some weight. A wake from another boat could easily cause you to be swamped.

When loading, place all equipment on the dock, board your boat, and then lift each item into the boat separately. Don't attempt to load up everything in your arms and step into the boat. In any event, don't ever step on the gunwale or side of your boat when boarding.

The right and wrong way to load your boat.

Photo courtesy Evinrude Motors

Bird of the Month:



Dickcissel

By DR. J. J. MURRAY
Lexington

SINCE the number of birds now recorded in Virginia runs to around 400 species and subspecies, it is only rarely that a new one is added to our state list. The bird of this month, the dickcissel, is not new but is a species that, for long almost absent from Virginia, has again taken its place with us.

This little bird has had an interesting history in our state. A century ago it was a common summer resident in the northern and central parts of Virginia. Since about 1875 it had practically disappeared from the eastern part of its range, with only occasional records in Virginia. In the past fifteen years it has returned to the eastern states. For this reason, in its account of the dickcissel, any bird book published twenty-five years ago is out of date. For a bird to desert any wide area and then after a long lapse of time to return is quite an unusual situation.

The dickcissel is now fairly common again in the northern part of Virginia, and has been reported in many areas from Newport News to Montgomery County. It can now be looked for in any place in the state.

The dickcissel is in the general group of birds to which the finches, towhees, and sparrows belong. It is somewhat smaller than an English sparrow. As Roger T. Peterson has remarked in his eastern *Field Guide*, the dickcissel suggests in its appearance a tiny meadowlark. The male has a yellow stripe over the eye, a yellow breast, and a black bib, or throat patch, clearly marked in summer but duller in winter. The female is much duller, with a hint of the yellow stripe over the eye. Both sexes have a chestnut patch at the bend of the wing. This is one of the birds that is onomatopoetic. That is, it announces its name in its song, "dic-ciss-ciss-ciss."

The dickcissel is a bird of the grasslands. I first saw it in a field at the border of Illinois and Indiana, and later in great numbers on the western prairies. When the Virginia Society of Ornithology had its 1967 summer foray in the lower Valley we found this bird fairly common. Mrs. Morgan Gilbert, of Washington, and the writer found a colony of some ten singing birds in a field of high grass near Front Royal.

It is good to be able to welcome this Virginia resident of long ago to its old haunts. It brings back to us an attractive bird and restores an economically valuable species to our pasture lands. It is useful to the farmer, its food the year round consists of weed seeds, varied with insects in the summer.

The nest, which I have not seen, is usually placed on the ground, occasionally in a low bush, with four or five greenish-white eggs, rarely with marks.

The latin name of the bird is *Spiza americana*, which means an American finch. This is one case where the latin name has been more stable than the English. The English name a hundred years ago was black-throated bunting.

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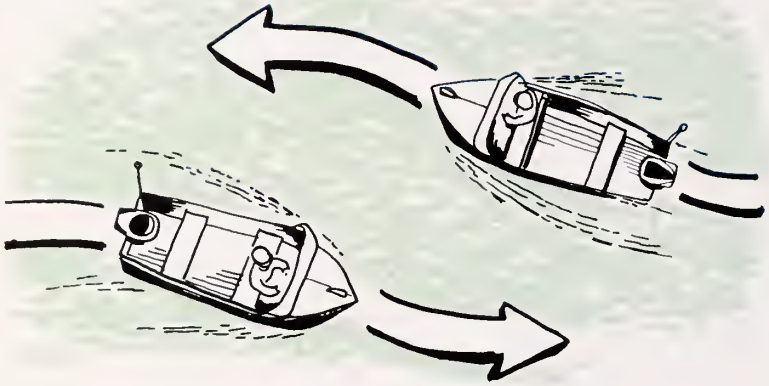
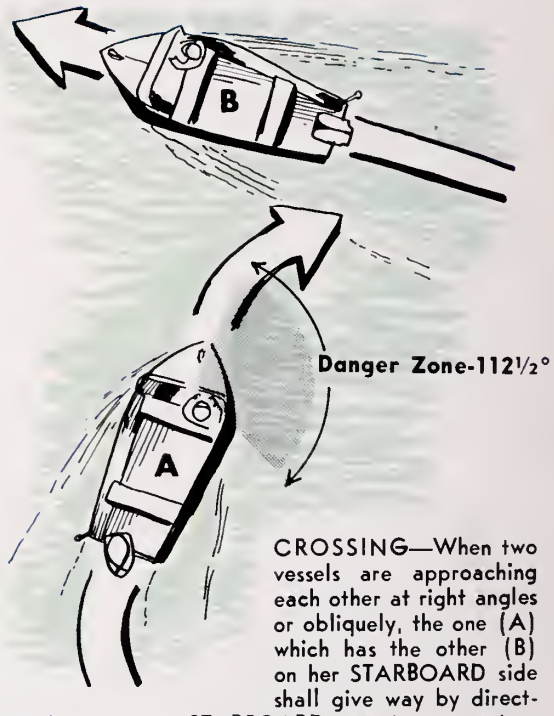
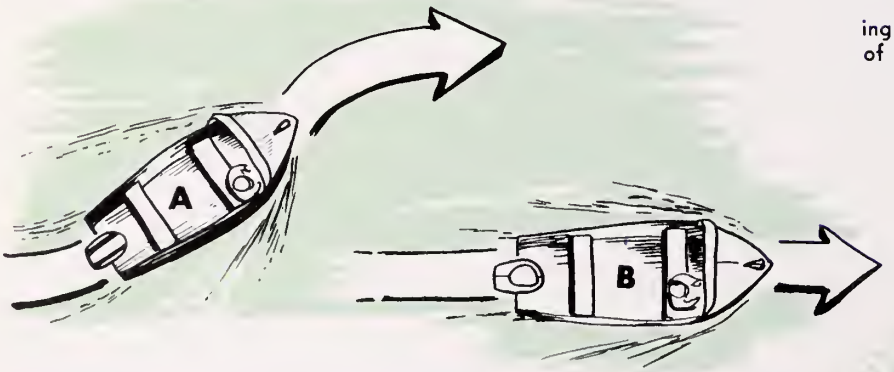
ULES of the ROAD



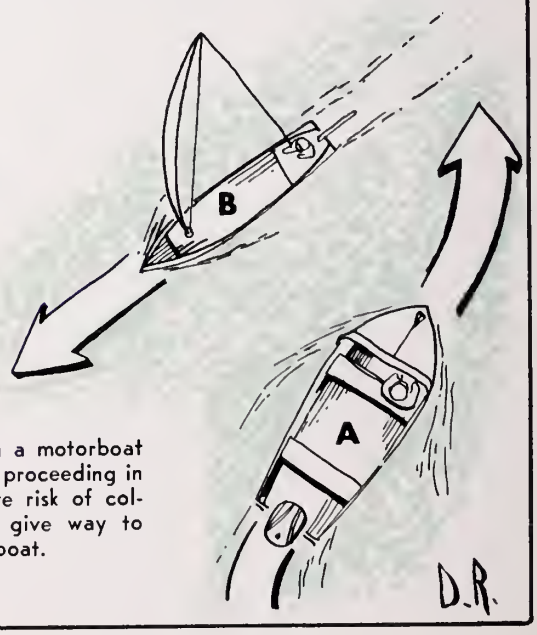
PASSING—When two vessels are approaching each other head-on or nearly so, it shall be the duty of each to maneuver to pass on the PORT side of the other.



CROSSING—When two vessels are approaching each other at right angles or obliquely, the one (A) which has the other (B) on her STARBOARD side shall give way by directing her course to STARBOARD so as to cross astern of (B) who is required to hold course and speed.



OVERTAKING—An overtaking vessel (A) shall keep clear of the overtaken vessel (B), but (B) shall not change course to crowd in upon or cross the bow of (A).



MOTOR AND SAIL—When a motorboat (A) and a sailboat (B) are proceeding in such a manner as to involve risk of collision, the motorboat must give way to and keep clear of the sailboat.

USE COMMON SENSE AND COURTESY ALONG WITH THE RULES OF THE ROAD FOR SAFER BOATING.